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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 08/770,792   | 12/19/1996  | JUN KOYAMA           | 07977/105001        | 3931             |
| 26171  | 7590        | 03/25/2004           | EXAMINER            |                  |
| FISH & RICHARDSON P.C.<br>1425 K STREET, N.W.<br>11TH FLOOR<br>WASHINGTON, DC 20005-3500 |             |                      | NGO, HUYEN LE       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2871                |                  |

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                      |  |
|------------------------------|---------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>08/770,792  | <b>Applicant(s)</b><br>KOYAMA ET AL. |  |
|                              | <b>Examiner</b><br>Julie-Huyen L. Ngo | <b>Art Unit</b><br>2871              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4,6,13,14,17,21-25,30,31,35,36,40-42,44,61-64 and 69-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4,6,13,14,17,21-25,30,31,35,36,40-42,44,61-64 and 69-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 19, 2004 has been entered except for the amendments to claims 61-64.

### ***Response to Amendment***

The amendment filed on January 9, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added matter, which is not supported by the original disclosure, is as follows:

In claims 61-64, the recitation calling for "*said nonconductive material/ weakly conductive material applied to three sides of said first substrate and three sides of said counter substrate,*" is not supported by the original disclosure. According to the original specification and drawings (figures 1 and 9), the nonconductive or weakly conductive resin 105/906 is applied to the cut surfaces/side edges of the substrates.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 61-64 and 69-72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 61-64 contain new subject matter: "*said nonconductive material/ weakly conductive material applied to three sides of said first substrate and three sides of said counter substrate.*" According to the original specification, the nonconductive material or weakly conductive resin 105/906 is applied only to the cut surface of each substrates; however, figures 1 and 9 show that nonconductive material or weakly conductive resin 105/906 is also applied to the inner surface of the each substrate. Therefore, it would be a maximum of two side surfaces, i.e., the cut/side edge surface and the inner surface of each substrate are being applied with the nonconductive material or weakly conductive resin 105/906.

Claims 69-72 are rejected as bearing the defects of the claims from which they depend.

For examination purpose, claims 61-64 would be treated according to what originally disclosed as set forth above.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 61-64 and 69-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 61-64, it is unclear from the language of the claims which side is the **“one side”** of the first or of the counter substrate that the nonconductive material or weakly conductive resin is not applied to. Also, it is unclear which sides are the **“three sides”** of the substrates that the nonconductive material or weakly conductive resin is applied to.

Claims 69-72 are rejected as bearing the defects of the claims from which they depend.

#### ***Claim Objections***

Claims 4, 6, 13, 14, 17, 21-25, 30, 31, 35, 36, 40-42, 44, 61-64 and 69-72 are objected to because of they recite “a first substrate;” however, there is no second substrate. It would be appropriate to refer to the first substrate as a TFT substrate.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4, 6, 13, 14, 17, 21-25, 30, 31, 35, 36, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawatsubashi et al. (U.S. 5,148,301).

Since the method claims are just the steps of forming the elements of the device, the method claims would have been obvious in view of the device. Therefore, the method claims are treated below with the corresponding device claims.

Sawatsubashi et al. disclose (Cols. 4-6 and Figures 3-5) an active matrix liquid crystal display (LCD) comprising all the features recited in the above claims including: (Claim 17)

- a plurality of pixel TFTs (104) arranged in rows and columns over a TFT/first substrate (101) and arrayed in a matrix;
- a counter substrate (102) located opposite to said first substrate;
- a layer of a liquid crystal material (109) provided between said first substrate (101) and said counter substrate (102);

Sawatsubashi teaches (col. 4, line 58 - col. 5, line 60) forming driving circuits 112/113 for supplying control signals, data signal and the like (col. 5, lines 9-17).

Sawatsubashi also discloses that these control circuits comprises an integrated circuit, which has a plurality of thin film transistors TFTs/driver TFTs (col. 4, lines 58-60), data latch circuit 112a having shift registers or the like, data signal generating circuit 112b, circulating memory circuit 113a, and a gate signal generating circuit 113b. Hence, these control circuits obviously are the control circuit chips, and are the control circuits for controlling said driver TFTs (col. 4, line 58 to col. 5 lines 54). These control circuits are provided under and in contact with the sealing material (108), and are provided over the first substrate (101, see figure 4).

Therefore, Sawatsubashi LCD would obviously have:

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- a driver TFT (col. 4, lines 58-60) provided over said first substrate (101);  
and
- a control circuit (112/113) comprising a control circuit chip provided under and in contact with said sealing material (108), said control circuit provided over said first substrate (see figs. 3-4) for controlling the driver TFT (col. 4, line 58 - col. 6, line 21).

Wherein:

(claims 21 and 23)

- a bus line (Gm/Dn) provided over said first substrate and connected with at least one of said pixel TFTs

(claims 22, 23 and 24)

- a sealing material (108) sealing around said liquid crystal material (109) and provided between said first substrate (101) and said counter substrate (102), said sealing material provided outside at least said pixel TFTs;

(claims 24 and 25)

- The first and counter substrates of said LCD were cut outside said sealing material 108 having said control circuit 112/113 under and in contact with said sealing material.

Claims 61-64 and 69-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted Prior Art (APA) in view of Inoue et al. (U.S.

5854664), McClelland et al (US4695490), Sasaki et al (US 4494825) or Kamoi et al (JP 61029821A published in 2/10/1986, submitted in Applicants' IDS paper no. 42).

APA discloses (p.2, lines 14-23, Figs 2-6) a conventional active matrix liquid crystal display comprising all the elements recited in claims 61-64 and 69-72 exclusive of:

- a non-conductive or weakly conductive material applied to the side edge of the TFT/first substrate (505), the side edge of the counter substrate (501), and the part of the bus line located adjacent to a side edge of said first substrate (504)

Wherein said non-conductive or weakly conductive material is provided on an outer side of the sealing material (502), and is not applied to one side of the first substrate and is not applied to one side of said counter substrate.

It is well known and conventional in the art to provide a non-conductive or weakly conductive material to cut side edges of glass substrates and cut side edge of a bus line to seal the cut side edges of a liquid crystal display device (LCD) to prevent the leakage of liquid crystal material and to prevent contaminate to the liquid crystal material, as taught by Inoue et al (col. 9, lines 25-31), McClelland et al. (col. 1, line 9-col. 2, line 26), and Sasaki et al. (Figure 2, col. 2, lines 35-48).

Further more, as evidenced by Kamoi et al., who teaches (see Fig. 5b) applying a second sealing layer 6 outside of the first sealing layer 5 to seal the sides edges of the substrates to prevent any adverse influences that are exerted to the liquid crystal material and orientation films. Doing so would prevent the leakage of liquid crystal



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material and obviated the generation of defective orientation. As a result, the resistance to high temperature and high humidity can be improved, and the reliability of a display device is improved.

Therefore, it would have been obvious for one of ordinary skill in the art to provide a non-conductive or weakly conductive material to the cut/ side edges of the substrates and bus line (504) in the APA device for completely sealing said side edges and said bus line to prevent the leakage of the liquid crystal material and any contaminate to the liquid crystal material, and to obviate the generation of defective orientation, as taught by Inoue et al, McClelland et al, Sasaki et al. or Kamoi et al. Doing so would improve the resistance to high temperature and high humidity, and improve the reliability of APA LCD device.

Thus claims 61-64 and 69-72 would have been obvious over Applicant's admitted Prior Art (APA) in view of Inoue, McClelland, Sasaki, or Kamoi et al. as applied above.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 4, 6, 13, 14, 17, 21-25, 30, 31, 35, 36, 40-42, 44, 61-64 and 69-72 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of Koyama et al (U.S. 6246454) in view of Inoue et al (U.S. 5854664), McClelland et al (US4695490), Sasaki et al (US 4494825), or Kamoi et al. (JP 61029821A published in 2/10/1986, submitted in Applicants' IDS paper no. 42) as set forth below:

Claims 17-19 and 25 of Koyama comprise all the limitations of claims 4, 6, 13, 14, 17, 21-25, 30, 31, 35, 36, 40-42, 44, 61-64 and 69-72 exclusive of:

- \_ the sealing material seals around the liquid crystal material
- \_ a non-conductive or weakly conductive material applied to the side edge of the first substrate, the side edge of the counter substrate and the part of the bus line located adjacent to said edge of the first substrate, wherein said non-conductive or weakly conductive material is provided on an outer side of a sealing material (903)
- \_ a channel formation region provided in a semiconductor film is provided over the first substrate.

Although claims 17-19 and 25 of Koyama do not explicitly include all of the above limitations it is understood that these claims are inherently included more than what being recited since the claim language in Koyama states that "An active matrix liquid crystal display **comprising**." This language encompasses for more than what was being recited in the claims.

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Moreover, any features that are not recited in a claim, but disclosed in the disclosure; it is indicated that the features are not critical and essential to the invention.

Koyama describes in the specification and shown (e.g. figures 2 and 4) that the sealing material (903) seals around the liquid crystal material (904).

The limitations of the channel formation region are fully disclosed in Koyama device (col. 3, lines 45-50 and col. 5, lines 31-41).

However, the set forth above features are well known and conventional for one of ordinary skill in the art to make such features, particularly the application of the non-conductive or weakly conductive material to the sides edges of the substrates as evidenced by Inoue, McClelland, Sasaki or Kamoi et al.'s teachings as set forth above in the rejection.

Therefore, one of ordinary skill in the art would have realized that the sealing material (903) is sealed around the liquid crystal material (904), and that the channel formation region provided in the semiconductor film is provided over the first substrate of Koyama LCD device.

Moreover, it would have been obvious for one of ordinary in the art to modify Koyama LCD device with a second sealing layer/nonconductive material applying to the outside of the first sealing member (903) to seal the sides edges of the substrates for preventing any adverse influences that are exerted to the liquid crystal material (904) and orientation films. Doing so would prevent the leakage of liquid crystal material and obviate the generation of defective orientation. As a result, the resistance to high

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temperature and high humidity can be improved, and the reliability of the Koyama display device is improved.

Also, it would have been obvious to one of ordinary skill in the art that the nonconductive or weakly conductive material is not applied to one side of the first substrate and is not applied to one side of the counter substrate since the non-conductive or weakly conductive material is only applied to the cut side edges of the substrates.

Therefore, claims 4, 6, 13, 14, 17, 21-25, 30, 31, 35, 36, 40-42, 44, 61-64 and 69-72 would have been obvious over the disclosed device and claims 17-19 and 25 of Koyama, and further in view of Inoue, McClelland, Sasaki or Kamoi et al.

### ***Response to Arguments***

Applicant's arguments filed January 9, 2004 have been fully considered but they are not persuasive.

Applicants' arguments are following:

1) Sawatsubashi fails to describe or suggest a control circuit chip provided under and in contact with the sealing material, where the control circuit is provided over the first substrate.

2) Sawatsubashi fails to describe or suggest a driver TFT that is controlled by a control circuit that is over and in contact with the sealing material. Sawatsubashi fails to

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describe a separate driver TFT and a separate control circuit for controlling the driver TFT, as recited in amended claims 17 and 21-25.

3) The APA, Inoue, McClelland, and Sasaki do not describe or suggest applying a nonconductive material to a side edge of counter substrate and a side edge of a first substrate. Moreover, they fail to disclose or suggest nonconductive or weakly conductive material applied to three sides of the first substrate and three sides of the counter substrate, as recited in amended claims 61-64.

4) The relied upon claims of Koyama do not recite a sealing material sealing around the liquid crystal material, as amended claims 17 and 21-25. None of Inoue, McClelland, Sasaki, or Kamoi references remedies the failure of the applied claims in Koyama reference to describe or suggest a sealing material sealing around the liquid crystal material.

5) Koyama, Inoue, McClelland, Sasaki, and Kamoi fail to describe or suggest a nonconductive material (claims 61 and 63) or a weakly conductive material (claims 62 and 64) that is applied to three sides of the first substrate and three sides of the counter substrate and not applied to one side of the first substrate and not applied to one side of the counter substrate.

Examiner's responses are following:

1) Sawatsubashi teaches (col. 4, line 58 - col. 5, line 60) that "the driving circuits 112/113 for supplying control signals, data signal and the like (col. 5, lines 9-17). Therefore, these driving circuits obviously would have been the control circuits. These control circuits are provided under and in contact with the sealing material (108), and are provided over the first substrate (101, see figure 4).

2) Sawatsubashi teaches (col. 4, line 58 - col. 5, line 54) that each of the control circuits 112/113 comprises an integrated circuit (col. 4, lines 58-66), which has a plurality of thin film transistors TFTs, hence these TFTs obviously are the driver TFT(s) that are controlled by the control circuits 112 and 113.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies:

"a control circuit that is over and in contact with the sealing material"

and "a separate driver TFT and a separate control circuit for controlling the driver TFT"

Applicant is to note that these limitations are neither recited in the amended claims 17 and 21-25 nor in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3) Applicants are to note that APA device has been applied as a primary reference, which comprises the sealing material (502). Inoue, McClelland, Sasaki and Kamoi et al have been applied as secondary references and as evidences to show that it is well known in the art to apply a nonconductive or weakly conductive material to side edges of the substrates for preventing contaminate to the liquid crystal material and leakage of the liquid crystal material.

Particularly, the reference of Kamoi et al. has been provided in the previous and this Office actions to further show (see Fig. 5b) that the practice of applying second sealing layer/ nonconductive material or weakly conductive material out to seal the sides edges of the substrates is a well known and conventional practice in the liquid crystal art for preventing contaminate to a liquid crystal material and leakage of the liquid crystal material in order to prevent any adverse influences that are exerted to the liquid crystal material and other elements of the LCD.

4) Although claims 17-19 and 25 of Koyama do not explicitly recite that the sealing material seals around the liquid crystal material, it is understood that these claims are inherently included more than what being recited since the claim language in Koyama states that "An active matrix liquid crystal display **comprising**." This language encompasses for more than what was being recited in the claims.

Nevertheless, any features that are not recited in a claim, but disclosed in the disclosure; it is indicated that the features are not critical and essential to the invention.

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Therefore, although the applied claims of Koyama do not recite a sealing material sealing around the liquid crystal material, one of ordinary skill in the art would have known that sealing material (903) seals around the liquid crystal material (904). This feature; however, is described in the specification and shown in different figures 2 and 4.

5) Applicants are to note that Koyama has been applied as a primary reference, which comprises the sealing material (903) seal around the liquid crystal (904). Inoue, McClelland, Sasaki and Kamoi et al have been applied as secondary references and as evidences to show that it is well known in the art to apply a nonconductive or weakly conductive material to side edges of the substrates for preventing contaminate to the liquid crystal material and leakage of the liquid crystal material. Therefore, it would have been obvious to have a nonconductive or weakly conductive material apply to side edges of the substrates in Koyama device for preventing contaminate to the liquid crystal material and leakage of the liquid crystal material.

Particularly, the reference of Kamoi et al. has been provided in the previous and this Office actions to further show (see Fig. 5b) that the practice of applying second sealing layer/ nonconductive material or weakly conductive material to seal the sides edges of the substrates is a well known and conventional practice in the liquid crystal art for preventing contaminate to a liquid crystal material, and for preventing leakage of the liquid crystal material in order to prevent any adverse influences that are exerted to the liquid crystal material and other elements of the LCD.



With respect to the nonconductive or weakly conductive material that is not applied to one side of the first substrate and is not applied to one side of the counter substrate," one of ordinary skill in the art would have realized that the nonconductive or weakly conductive material is not applied to one side of the first substrate and is not applied to one side of the counter substrate since the non-conductive or weakly conductive material is only applied to the cut side edges of the substrates, as set forth above in the rejection.

In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies:

"a nonconductive material (amended claims 61 and 63) or a weakly conductive material (amended claims 62 and 64) that is applied to three sides of the first substrate and three sides of the counter substrate."

Applicant is to note that these features are not recited in the rejected claims.

However, these features constitute new subject matter that was not described in the original specification, and being rejected as set forth above in the rejection of this Office action.

### ***Conclusion***

This is a continuation of applicant's earlier Application No. 08/770,792. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL**

even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

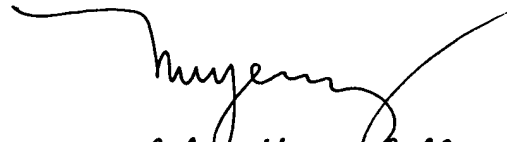
***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

March 16, 2004

  
*Julie-Huyen L. Ngo*  
**Primary Patent Examiner**  
Art Unit 2871